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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,052	12/04/2001	Adelmo Monsalve-Gonzalez	5553	9205

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EXAMINER

TRAN LIEN, THUY

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,052	MONSALVE-GONZALEZ ET AL.	
	Examiner	Art Unit	
	Lien T Tran	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 1,15,38-40, 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite. While the preamble recites a method of preparing a bran product, the body of the claim does not recite step of how the bran is prepared. How is the bran obtained after it is treated with ozone? The recitation of one treating step does not tell how the bran is prepared. The body of the claim is not commensurate in scope with the preamble. On line 2, what does applicant mean by " bran derived"; derived from what?

Claim 15 is vague and indefinite. The step of " treating the filtered wet bran with catalase to remove residual hydrogen peroxide" is unclear because the claims have not recited that the bran is treated with hydrogen peroxide. It is not clear what this step means.

In claims 38, 39, 40, it is suggested applicant be consistent with the terminology.

Claims 11, 18 and 21 recite a " method", not process.

Claim 44 is vague and indefinite; it is not clear what is prepared from light bran, the grain product or the cereal bran?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 33-35 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Stanley (4,844,924).

Stanley discloses a method of preparing a bran product. The method comprises the steps of reacting the bran with lower aliphatic carboxylic acid, acid halide, ester or anhydride and bleaching the reacted bran with one or more bleaching agents. The agents used are peroxides, chlorites, peracids and ozone. Following breaching, the bleached bran is isolated from the bleaching medium by filtration, centrifugation etc, washed and dried to form a free-flowing particulate. (see columns 1,3-4 and example 5).

The reference discloses the limitations of the above cited claims. While column 3 lines 40-46 discloses the pH is maintained at 8-10 when the bran is reacted with the esterifying agent, the pH is adjusted to an acidic level after the esterifying step and before the bleaching step. Example 5 discloses adjusting the ph to 5 before bleaching. This meets the limitation of acidifying the bran to a pH of about 4-6 prior to treating with ozone cited in claim 2. The bleaching agent can be ozone as cited on column 3 line 65. The properties recited in claims 1, 3,4,5 and 36 are inherent in the Stanley product because it is treated the same as claimed. Stanley also discloses the product prepared from the method which meets the limitation of claims 33,34 and 35.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7-32 and 37-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanley in view of Metzger.

The teaching of Stanley is described above. Stanley does not disclose the bran is wheat bran or red wheat bran, the size of the bran is about 100 microns, the steps recited in claims 10-15, the acid as in claims 16-17, the moisture content of the bran, the amount of ozone, admixing the bran with flour, forming a dry mix, forming cereal pieces, adding the bran to a grain product and forming the grain product into finished baked good.

Metzger discloses a method of bleaching cereal grain. He teaches to a chelating agent such as EDTA to remove any metal ions which may destroy the bleaching agent. (see col. 4 lines 28-32).

While Stanley discloses the preferred bran is corn bran, other material including vegetable, cereal and fruit sources can be used as the starting material. Therefore, it would have been obvious to one skilled in the art to use other type of bran when desiring to bleach such bran product. Stanley discloses bran of varying particle sizes; it would have been an obvious matter of choice to pick any size. It would also have

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been obvious to determine the amount of ozone to be used through routine experimentation depending on the degree of bleaching desired and the amount of time at which bleaching is carried out. For example, a higher concentration will reduce the bleaching time or vice versa. It would also have been obvious to one skilled in the art to treat the bran with a chelating agent as taught by Metzger to remove the transition metal which might affect the function of the bleaching agent. While Metzger discloses the bleaching agent is peroxide, both peroxide and ozone are oxidative bleaching agents; thus, whatever function is obtained for one oxidative bleaching agent, it is equally applicable to the other oxidative bleaching agent. The amount, time and temperature of treatment can be determined through routine experimentation to obtain the most optimum result. As to the blanching to inactivate catalase and peroxidase, the specification discloses these enzymes are found in native grain product; it would have been obvious to one to blanch the grain when desiring to inactive these enzymes because heat is a commonly used method to denature protein. The time of blanching can be determined through routine experimentation depending on the enzymatic activity desiring to obtain. Stanley discloses one or more oxidative bleaching agent can be used. When hydrogen peroxide is used in combination with ozone, it would have been obvious to use catalase to remove any residual hydrogen peroxide so that the bleaching reaction does not carry on beyond the stopping point. Catalase is well known in the art to perform this function. Using an additive for its art-recognized function would have been obvious to one skilled in the art. The bran product disclosed by Stanley is a dietary fiber material having improved color stability. It would have been obvious to one

skilled in the art to add the bran product to any food product including dry mix, cereal, grain product, baked goods etc...when one desires to increase the fiber content of that product. Stanley discloses adding the bran to dough for bread, crackers, cookies and biscuits. If the bran can be added to the dough, it can be added to the flour which is used to make the dough. The use of whole wheat flour or regular wheat flour would have been an obvious matter of choice. It would also have been obvious to add the bran to grain product and cereal product because these food products are typical made to have a high fiber content. The addition of the bran will serve such purpose. The making of cereal pieces is well known in the art; thus, the steps of making the cereal pieces would have been readily apparent to one skilled in the art. It would also have been obvious to use grain product to prepare baked good because they are commonly prepared from grain product. The properties in claims 41 and 43 are obviously found in the Stanley product because it is prepared using the same method as claimed. When the bran is added to whole wheat flour, it is obvious the pH will be the same as claimed because the same flour is used.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Astrack et al disclose the ozonolysis of whole cardamon seeds.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Tuesday, Wednesday and Friday.

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. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

December 15, 2003

Lentia
LIENTH
PRIMARY EXAMINER
C/poup/702